VII. CHARACTERIZATION OF HISTORICAL TRENDS, CURRENT STATUS, AND HUMAN IMPACTS ON GALVESTON BAY

The characterization of Galveston Bay will be based on about three years of work to analyze historical data and conduct new scientific/technical investigations. This work will be specifically directed toward investigating priority problems, and will make use of the DIMS. The focus of work will be to determine historical trends to date in Galveston Bay and to identify the causes for these trends. Particular attention will be directed toward human impacts, including contaminants from point and nonpoint sources. This knowledge, summarized in issue papers, annual State-of-the-Bay reports, technical publications, and the final Characterization Report will become the basis for implementing effective management actions.

The goal of the characterization process is not to completely define cause-effect mechanisms and natural ecological processes in Galveston Bay. Rather, it is to investigate, at an applied level, those aspects of the estuary specifically affected by human impacts addressable with environmental management. The characterization phase is too short for new long-term research efforts, and the need for effective management is too great to expend resources on programs not specifically aimed at true problems in the estuary.

This work will specifically address purposes 1, 2, and 3 of the Water Quality Act of 1987 and guidance item number 5 and 6 from OMEP concerning trends analyses and cause/effect studies of human impacts to the bay. The following program components describe work to be completed:

- o Review priority problems and historical data to determine analyses to be conducted on existing data and to determine new investigations to gather and analyze additional data. Investigations and analyses are tied to the priority problems and their management solutions, and will explicitly address historical trends, current status, and human influences on Galveston Bay. Individual analyses and investigations are recommended by Management Committee and approved by Policy Committee, based on extensive review of each analysis or investigation by the scientific and regulatory community.
- o Publish issue papers and an annual "State of the Bay Report" concerning study findings and critical problems and management questions. Distribute these to participants and public during the investigations to stimulate comment and involvement and to enhance general knowledge. These publications will augment any interim technical reports or papers resulting from the work.
- o Compile draft Characterization Report based on analyses and investigations. Report will explicitly address historical trends, current status, and human influences on Galveston Bay. Report is written to both address and revise the Priority Problems List based on investigations, and is reviewed by project participants, EPA, and general public.

- o Submit final Characterization Report for recommendation by Management Committee and approval by Policy Committee, as a basis for determining and implementing management solutions to the priority problems.
- o Distribute final Characterization Report to public and EPA Region VI and OMEP.